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IN THE CLAIMS:

- 1 1. (Currently Amended) A laser system comprising:
- 2 (a) a laser generating a main beam;
- 3 (b) a guard band laser arranged concentric to the main laser beam and generating a
- 4 guard band beam;
- 5 (c) a guard band receiver spaced from the laser for receiving the guard band beam;
- 6 (d) a trigger circuit coupled to the guard band receiver, the trigger circuit generating a
- 7 signal upon interruption of the guard band beam as detected by the guard band receiver; and
- 8 (e) means responsive to the trigger circuit for altering the performance of the main
- 9 beam upon interruption of the guard band beam.
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- 1 2. (Original Claim) The laser system of Claim 1 wherein the guard band laser is an annular
- 2 laser.

- 1 3. (Original Claim) The laser system of Claim 1 wherein the guard band laser is a set of
- 2 lasers arranged concentric to the laser.

- 1 4. (Previously Amended) A laser system having improved signal continuity and safety,
- 2 comprising:
- 3 (a) a laser including an energy source and optical surface in a chamber coupled to an
- 4 energy pump and providing a laser beam;

(b) a guard laser concentric with the laser including an energy source and an optical surface in a chamber coupled to an energy pump and providing a guard beam surrounding the laser beam as a protective layer;

(c) a receiver spaced from the laser comprising a central lens for receiving the laser beam and coupled to the laser;

(d) an annular, segmented set of mirrors and lenses surrounding the central lens as a set of parallel receivers for receiving the guard laser beam;

(e) a trigger circuit connected to the set of parallel receivers for generating a signal upon interruption of the guard beam; and

(f) means responsive to the trigger circuit for altering the laser beam upon interruption of the guard beam.

CA 1 5. (Currently Amended) The laser system of Claim 4 further comprising:
2 sensor means ~~coupled to the trigger circuit~~ for detecting climatic conditions of dust, rain and
3 other environmental elements and preventing shutdown of the main laser.

CP 1 6. (Currently Amended) The laser system of Claim 4 further comprising:
2 a return signal laser responding to guard band interruptions as sensed by the parallel
3 receivers which activate the trigger circuit in generating a ~~return~~ trigger signal to the return
4 signal laser to shut down or modify the signal level of the laser beam.

7. (Currently Amended) The laser system of Claim 4 further comprising:
a buffer circuit coupled to the laser for storing an input signal to the laser prior to
shutdown.

8. (Original Claim) The laser system of Claim 4 wherein the guard beam is coaxially
aligned with the laser beam.

9. (Original Claim) The laser system of Claim 4 wherein the guard beam is aligned and
cone shaped with respect to the laser beam.

10. (Original Claim) The laser system of Claim 4 wherein the laser is a continuous wave
laser.

11. (Original Claim) The laser system of Claim 4 wherein the guard laser is a pulsed laser.

12. (Currently Amended) A laser system having improved signal continuity and safety,
comprising:
(a) a continuous wave laser including an energy source and optical surface in a
chamber coupled to an energy pump and providing a laser beam;
(b) a pulsed guard laser concentric with the laser including an energy source and an
optical surface in a chamber coupled to an energy pump and providing a coaxially aligned guard
beam surrounding the laser beam as a protective layer;

8 (c) a receiver comprising a central lens for receiving the laser beam and coupled to a
9 main receiver;

10 (d) an annular, segmented set of mirrors and lenses surrounding the central lens as a
11 set of parallel receivers for receiving the guard laser beam;

12 (e) a trigger circuit connected to the set of parallel receivers for generating a trigger
13 signal upon interruption of the guard beam;

14 (f) a return laser circuit means responsive to the trigger circuit for altering the
15 performance of laser beam upon interruption of the guard beam;

16 (g) a buffer circuit coupled to the return laser circuit means for storing an input signal
17 to the laser, prior to shutdown;

18 (h) means for discharging the buffer circuit to the laser upon termination of the trigger
19 signal; and

20 (i) means for sensing climatic conditions of dust, rain and other environmental
21 elements affecting the guard beam and preventing shutdown of the laser.

1 13. (Original Claim) In a laser system including a main laser optically coupled to a main lens
2 receiver, a guard laser optically coupled to a segmented set of lenses surrounding the main lens
3 and serving as parallel receivers for the guard laser, a method of providing improved signal
4 continuity and safety for the main laser, comprising the steps of:

5 (a) transmitting a laser beam from the main laser to the main lens;

6 (b) transmitting and coaxially aligning a guard beam with the main laser beam as a
7 protective layer surrounding the main laser beam;

8 (c) receiving the main laser beam in the main lens;

- 9 (d) receiving the guard beam in the segmented set of parallel receivers;
- 10 (e) detecting an interruption in the protective layer by the set of parallel receivers;
- 11 (f) generating a signal in response to the interruption of the protective layer; and
- 12 (g) altering the performance of the main laser beam in response to the generated
- 13 signal.

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14. (Currently Amended) The method of Claim 13 further comprising the step of:
- 15 (h) generating signals indicative of climatic conditions of dust, rain and other
- 16 environmental elements affecting the low power beam; and
- 17 (i) preventing the termination of the main laser beam in response to such climatic
- 18 conditions.

- 19 15. (Original Claim) The method of Claim 13 further comprising the step of:
- 20 (j) coupling a return laser to the generated signal for altering the performance
- 21 including shutdown of the main laser in response to the generated signal.

- 22 16. (Original Claim) The method of Claim 13 further comprising the step of:
- 23 (k) storing an input signal to the main laser prior to and during the period of the main
- 24 laser shutdown due to the generated signal.

- 25 17. (Original Claim) The method of Claim 16 further comprising the step of:
- 26 (l) restoring the stored signal and the input signal to the main laser upon termination
- 27 of the generated signal.

- 1 18. (Original Claim) The method of Claim 13 further comprising the step of:
- 2 (m) coupling a trigger circuit to the set of parallel receivers for producing the
- 3 generated signal when the protective layer is interrupted.
- 1 19. (Original Claim) The method of Claim 13 wherein the main laser transmits a continuous
- 2 wave beam.
- 1 20. (Original Claim) The method of Claim 13 wherein the guard beam laser transmits a low
- 2 power pulsed beam.
- 1 21. (Original Claim) The method of Claim 13 further comprising the step of:
- 2 (n) disposing a template about an area on a patient in which surgery is to be
- 3 performed;
- 4 (o) directing the laser beam into the area to perform surgery;
- 5 (p) terminating the laser beam when the template is contacted by the laser beam; and
- 6 (q) restoring the laser beam when the laser beam is re-directed into the area.